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11 August 2015

Curtis Hartenstein  
Southern Ute Tribe Environmental  
PO Box 737  
Ignacio, CO 81137  
RE: 8/8/15

Enclosed are the results of analyses for samples received by the laboratory on 08/08/15 16:00.  
If you need any further assistance, please feel free to contact me.

Sincerely,

DRAFT REPORT  
DATA SUBJECT TO CHANGE

All accredited analytes contained in this report are denoted by an asterisk (\*). For a complete list of accredited analytes please do not hesitate to contact us via any of the contact information contained in this report. All of our certifications can be viewed at <http://greenanalytical.com/certifications/>

Green Analytical Laboratories is NELAP accredited through the Texas Commission on Environmental Quality. Accreditation applies to drinking water and non-potable water matrices for trace metals and a variety of inorganic parameters. Green Analytical Laboratories is also accredited through the Colorado Department of Public Health and Environment and EPA region 8 for trace metals, Cyanide, Fluoride, Nitrate, and Nitrite in drinking water.

Our affiliate laboratory, Cardinal Laboratories, is also NELAP accredited through the Texas Commission on Environmental Quality for a variety of organic constituents in drinking water, non-potable water and solid matrices. Cardinal is also accredited for regulated VOCs, TTHM, and HAA-5 in drinking water



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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

**Reported:**  
08/11/15 16:21

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NAR6	1508098-01	Water	08/08/15 14:00	08/08/15 16:00
AR 7-2	1508098-02	Water	08/08/15 14:30	08/08/15 16:00
AR 16-0	1508098-03	Water	08/08/15 15:00	08/08/15 16:00
AR 19-3	1508098-04	Water	08/08/15 15:30	08/08/15 16:00
AR 16-0 Dupe	1508098-05	Water	08/08/15 15:00	08/08/15 16:00

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

**NAR6****1508098-01 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Alkalinity, Bicarbonate*	82.0	10.0		mg/L	1	08/11/15	2320 B		LLG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	1	08/11/15	2320 B		LLG

**Total Recoverable Metals by ICP (E200.7)**

Aluminum*	1.57	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	55.2	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness, 200.2 Metals	173	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	3.93	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	8.44	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.145	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.67	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	12.2	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

**Dissolved Metals by ICP**

Aluminum*	<0.050	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	53.1	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness	166	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	<0.050	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	8.03	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.022	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.24	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	12.0	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

## NAR6

### 1508098-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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#### Total Recoverable Metals by ICPMS (E200.8)

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/11/15	EPA200.8		JGS
Arsenic*	0.0035	0.0015	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Barium*	0.0700	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Cadmium*	0.0003	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Chromium*	<0.0010	0.0010	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Cobalt*	0.0006	0.0001	0.000006	mg/L	1	08/11/15	EPA200.8		JGS
Copper*	0.0147	0.0001	0.00006	mg/L	1	08/11/15	EPA200.8		JGS
Lead*	0.0532	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Molybdenum*	0.0017	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Nickel*	0.0022	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Selenium*	0.0011	0.0010	0.0003	mg/L	1	08/11/15	EPA200.8		JGS
Silver*	0.0004	0.0001	0.00003	mg/L	1	08/11/15	EPA200.8		JGS
Thallium*	0.0002	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Zinc*	0.0825	0.0010	0.0004	mg/L	1	08/11/15	EPA200.8		JGS

#### Dissolved Metals by ICPMS

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/10/15	EPA200.8		JGS
Arsenic*	<0.0005	0.0005	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Barium*	0.0512	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Cadmium*	<0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Chromium*	0.0025	0.0010	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Cobalt*	0.0001	0.0001	0.000006	mg/L	1	08/10/15	EPA200.8		JGS
Copper*	0.0032	0.0001	0.00006	mg/L	1	08/10/15	EPA200.8		JGS
Lead*	<0.0005	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Molybdenum*	0.0011	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Nickel*	0.0019	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/10/15	EPA200.8		JGS
Silver*	<0.0001	0.0001	0.00003	mg/L	1	08/10/15	EPA200.8		JGS
Thallium*	0.0002	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Vanadium*	0.0007	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Zinc*	0.0144	0.0100	0.0004	mg/L	1	08/10/15	EPA200.8		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

**Reported:**  
08/11/15 16:21

### NAR6

#### 1508098-01 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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#### Total Mercury by CVAA

Mercury*	<0.0002	0.0002	0.00002	mg/L	1	08/10/15	245.1		JGS
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PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

## AR 7-2

## 1508098-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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## General Chemistry

Alkalinity, Bicarbonate*	75.0	10.0		mg/L	1	08/11/15	2320 B		LLG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	1	08/11/15	2320 B		LLG

## Total Recoverable Metals by ICP (E200.7)

Aluminum*	0.949	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	56.2	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness, 200.2 Metals	175	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	3.29	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	8.37	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.129	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.56	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	11.4	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

## Dissolved Metals by ICP

Aluminum*	<0.050	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	54.9	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness	171	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	<0.050	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	8.16	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.025	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.33	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	11.4	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

## AR 7-2

## 1508098-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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## Total Recoverable Metals by ICPMS (E200.8)

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/11/15	EPA200.8		JGS
Arsenic*	0.0032	0.0015	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Barium*	0.0531	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Cadmium*	0.0003	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Chromium*	<0.0010	0.0010	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Cobalt*	0.0005	0.0001	0.000006	mg/L	1	08/11/15	EPA200.8		JGS
Copper*	0.0135	0.0001	0.00006	mg/L	1	08/11/15	EPA200.8		JGS
Lead*	0.0457	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Molybdenum*	0.0016	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Nickel*	0.0021	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/11/15	EPA200.8		JGS
Silver*	0.0003	0.0001	0.00003	mg/L	1	08/11/15	EPA200.8		JGS
Thallium*	0.0001	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Zinc*	0.0811	0.0010	0.0004	mg/L	1	08/11/15	EPA200.8		JGS

## Dissolved Metals by ICPMS

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/10/15	EPA200.8		JGS
Arsenic*	<0.0005	0.0005	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Barium*	0.0465	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Cadmium*	<0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Chromium*	0.0036	0.0010	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Cobalt*	0.0001	0.0001	0.000006	mg/L	1	08/10/15	EPA200.8		JGS
Copper*	0.0026	0.0001	0.00006	mg/L	1	08/10/15	EPA200.8		JGS
Lead*	0.0013	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Molybdenum*	0.0011	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Nickel*	0.0017	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/10/15	EPA200.8		JGS
Silver*	<0.0001	0.0001	0.00003	mg/L	1	08/10/15	EPA200.8		JGS
Thallium*	0.0002	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Vanadium*	0.0010	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Zinc*	0.0225	0.0100	0.0004	mg/L	1	08/10/15	EPA200.8		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
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AR 7-2

1508098-02 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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Total Mercury by CVAA

Mercury*	<0.0002	0.0002	0.00002	mg/L	1	08/10/15	245.1		JGS
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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

**AR 16-0****1508098-03 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Alkalinity, Bicarbonate*	65.0	10.0		mg/L	1	08/11/15	2320 B		LLG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	1	08/11/15	2320 B		LLG

**Total Recoverable Metals by ICP (E200.7)**

Aluminum*	0.708	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	54.0	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness, 200.2 Metals	168	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	2.52	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	7.96	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.131	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.43	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	10.8	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

**Dissolved Metals by ICP**

Aluminum*	0.060	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	54.0	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness	167	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	<0.050	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	7.91	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.048	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.20	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	11.0	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

## AR 16-0

## 1508098-03 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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## Total Recoverable Metals by ICPMS (E200.8)

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/11/15	EPA200.8		JGS
Arsenic*	0.0027	0.0015	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Barium*	0.0483	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Cadmium*	0.0003	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Chromium*	<0.0010	0.0010	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Cobalt*	0.0005	0.0001	0.000006	mg/L	1	08/11/15	EPA200.8		JGS
Copper*	0.0109	0.0001	0.00006	mg/L	1	08/11/15	EPA200.8		JGS
Lead*	0.0345	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Molybdenum*	0.0013	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Nickel*	0.0020	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/11/15	EPA200.8		JGS
Silver*	0.0002	0.0001	0.00003	mg/L	1	08/11/15	EPA200.8		JGS
Thallium*	<0.0001	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Zinc*	0.0691	0.0010	0.0004	mg/L	1	08/11/15	EPA200.8		JGS

## Dissolved Metals by ICPMS

Antimony*	0.0010	0.0005	0.00007	mg/L	1	08/10/15	EPA200.8		JGS
Arsenic*	0.0007	0.0005	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Barium*	0.0432	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Cadmium*	<0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Chromium*	0.0030	0.0010	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Cobalt*	0.0002	0.0001	0.000006	mg/L	1	08/10/15	EPA200.8		JGS
Copper*	0.0029	0.0001	0.00006	mg/L	1	08/10/15	EPA200.8		JGS
Lead*	<0.0005	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Molybdenum*	0.0011	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Nickel*	0.0018	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/10/15	EPA200.8		JGS
Silver*	<0.0001	0.0001	0.00003	mg/L	1	08/10/15	EPA200.8		JGS
Thallium*	0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Vanadium*	0.0009	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Zinc*	0.0139	0.0010	0.0004	mg/L	1	08/10/15	EPA200.8		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

**Reported:**  
08/11/15 16:21

**AR 16-0**

**1508098-03 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**Total Mercury by CVAA**

Mercury*	<0.0002	0.0002	0.00002	mg/L	1	08/10/15	245.1		JGS
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PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### AR 19-3

#### 1508098-04 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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#### General Chemistry

Alkalinity, Bicarbonate*	70.0	10.0		mg/L	1	08/11/15	2320 B		LLG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	1	08/11/15	2320 B		LLG

#### Total Recoverable Metals by ICP (E200.7)

Aluminum*	0.714	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	54.5	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness, 200.2 Metals	169	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	2.70	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	8.01	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.153	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.34	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	10.5	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

#### Dissolved Metals by ICP

Aluminum*	0.085	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	54.1	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness	167	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	<0.050	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	7.80	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.083	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.32	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	10.4	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

## AR 19-3

## 1508098-04 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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## Total Recoverable Metals by ICPMS (E200.8)

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/11/15	EPA200.8		JGS
Arsenic*	0.0031	0.0015	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Barium*	0.0512	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Cadmium*	0.0003	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Chromium*	<0.0010	0.0010	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Cobalt*	0.0006	0.0001	0.000006	mg/L	1	08/11/15	EPA200.8		JGS
Copper*	0.0131	0.0001	0.00006	mg/L	1	08/11/15	EPA200.8		JGS
Lead*	0.0377	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Molybdenum*	0.0013	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Nickel*	0.0022	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Selenium*	0.0013	0.0010	0.0003	mg/L	1	08/11/15	EPA200.8		JGS
Silver*	0.0002	0.0001	0.00003	mg/L	1	08/11/15	EPA200.8		JGS
Thallium*	<0.0001	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Zinc*	0.0845	0.0010	0.0004	mg/L	1	08/11/15	EPA200.8		JGS

## Dissolved Metals by ICPMS

Antimony*	0.0007	0.0005	0.00007	mg/L	1	08/10/15	EPA200.8		JGS
Arsenic*	0.0006	0.0005	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Barium*	0.0474	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Cadmium*	<0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Chromium*	0.0016	0.0010	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Cobalt*	0.0002	0.0001	0.000006	mg/L	1	08/10/15	EPA200.8		JGS
Copper*	0.0028	0.0001	0.00006	mg/L	1	08/10/15	EPA200.8		JGS
Lead*	<0.0005	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Molybdenum*	0.0010	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Nickel*	0.0019	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/10/15	EPA200.8		JGS
Silver*	<0.0001	0.0001	0.00003	mg/L	1	08/10/15	EPA200.8		JGS
Thallium*	0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Vanadium*	0.0005	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Zinc*	0.0157	0.0010	0.0004	mg/L	1	08/10/15	EPA200.8		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

**Reported:**  
08/11/15 16:21

**AR 19-3**

**1508098-04 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**Total Mercury by CVAA**

Mercury*	<0.0002	0.0002	0.00002	mg/L	1	08/10/15	245.1		JGS
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DRAFT REPORT

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PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

**AR 16-0 Dupe****1508098-05 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**General Chemistry**

Alkalinity, Bicarbonate*	64.0	10.0		mg/L	1	08/11/15	2320 B		LLG
Alkalinity, Carbonate*	<10.0	10.0		mg/L	1	08/11/15	2320 B		LLG

**Total Recoverable Metals by ICP (E200.7)**

Aluminum*	0.654	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	54.0	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness, 200.2 Metals	168	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	2.57	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	7.99	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.135	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.39	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	10.8	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

**Dissolved Metals by ICP**

Aluminum*	0.060	0.050	0.020	mg/L	1	08/11/15	EPA200.7		JGS
Calcium*	53.6	0.020	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Hardness	166	0.462	0.140	mgCaCO3/L	1	08/11/15	2340 B		JGS
Iron*	<0.050	0.050	0.003	mg/L	1	08/11/15	EPA200.7		JGS
Magnesium*	7.88	0.100	0.032	mg/L	1	08/11/15	EPA200.7		JGS
Manganese*	0.050	0.005	0.0007	mg/L	1	08/11/15	EPA200.7		JGS
Potassium*	2.23	1.00	0.335	mg/L	1	08/11/15	EPA200.7		JGS
Sodium*	10.9	1.00	0.305	mg/L	1	08/11/15	EPA200.7		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### AR 16-0 Dupe

#### 1508098-05 (Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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#### Total Recoverable Metals by ICPMS (E200.8)

Antimony*	<0.0015	0.0015	0.00007	mg/L	1	08/11/15	EPA200.8		JGS
Arsenic*	0.0026	0.0015	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Barium*	0.0541	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Cadmium*	0.0003	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Chromium*	<0.0010	0.0010	0.0002	mg/L	1	08/11/15	EPA200.8		JGS
Cobalt*	0.0005	0.0001	0.000006	mg/L	1	08/11/15	EPA200.8		JGS
Copper*	0.0115	0.0001	0.00006	mg/L	1	08/11/15	EPA200.8		JGS
Lead*	0.0353	0.0005	0.00004	mg/L	1	08/11/15	EPA200.8		JGS
Molybdenum*	0.0013	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Nickel*	0.0021	0.0005	0.00002	mg/L	1	08/11/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/11/15	EPA200.8		JGS
Silver*	0.0002	0.0001	0.00003	mg/L	1	08/11/15	EPA200.8		JGS
Thallium*	<0.0001	0.0001	0.00001	mg/L	1	08/11/15	EPA200.8		JGS
Zinc*	0.0711	0.0010	0.0004	mg/L	1	08/11/15	EPA200.8		JGS

#### Dissolved Metals by ICPMS

Antimony*	0.0005	0.0005	0.00007	mg/L	1	08/10/15	EPA200.8		JGS
Arsenic*	0.0007	0.0005	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Barium*	0.0493	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Beryllium*	<0.0005	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Cadmium*	<0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Chromium*	0.0028	0.0010	0.0002	mg/L	1	08/10/15	EPA200.8		JGS
Cobalt*	0.0003	0.0001	0.000006	mg/L	1	08/10/15	EPA200.8		JGS
Copper*	0.0029	0.0001	0.00006	mg/L	1	08/10/15	EPA200.8		JGS
Lead*	<0.0005	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Molybdenum*	0.0010	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Nickel*	0.0023	0.0005	0.00002	mg/L	1	08/10/15	EPA200.8		JGS
Selenium*	<0.0010	0.0010	0.0003	mg/L	1	08/10/15	EPA200.8		JGS
Silver*	<0.0001	0.0001	0.00003	mg/L	1	08/10/15	EPA200.8		JGS
Thallium*	0.0001	0.0001	0.00001	mg/L	1	08/10/15	EPA200.8		JGS
Vanadium*	0.0008	0.0005	0.00004	mg/L	1	08/10/15	EPA200.8		JGS
Zinc*	0.0280	0.0010	0.0004	mg/L	1	08/10/15	EPA200.8		JGS

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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

**Reported:**  
08/11/15 16:21

**AR 16-0 Dupe**

**1508098-05 (Water)**

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
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**Total Mercury by CVAA**

Mercury*	<0.0002	0.0002	0.00002	mg/L	1	08/10/15	245.1		JGS
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Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Total Recoverable Metals by ICP (E200.7) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B508089 - EPA 200.2

##### Blank (B508089-BLK1)

Prepared & Analyzed: 08/11/15

Aluminum	ND	0.050	mg/L							
Calcium	0.023	0.020	mg/L							B1
Iron	ND	0.050	mg/L							
Magnesium	ND	0.100	mg/L							
Manganese	ND	0.005	mg/L							
Potassium	ND	1.00	mg/L							
Sodium	ND	1.00	mg/L							

##### LCS (B508089-BS1)

Prepared & Analyzed: 08/11/15

Aluminum	4.07	0.050	mg/L	4.00		102	85-115			
Calcium	4.11	0.020	mg/L	4.00		103	85-115			
Iron	3.93	0.050	mg/L	4.00		98.3	85-115			
Magnesium	21.0	0.100	mg/L	20.0		105	85-115			
Manganese	2.07	0.005	mg/L	2.00		104	85-115			
Potassium	8.34	1.00	mg/L	8.00		104	85-115			
Sodium	6.52	1.00	mg/L	6.48		101	85-115			

##### LCS Dup (B508089-BSD1)

Prepared & Analyzed: 08/11/15

Aluminum	4.00	0.050	mg/L	4.00		100	85-115	1.64	20	
Calcium	4.02	0.020	mg/L	4.00		101	85-115	2.22	20	
Iron	3.91	0.050	mg/L	4.00		97.7	85-115	0.694	20	
Magnesium	20.5	0.100	mg/L	20.0		103	85-115	2.44	20	
Manganese	2.03	0.005	mg/L	2.00		102	85-115	1.95	20	
Potassium	8.08	1.00	mg/L	8.00		101	85-115	3.06	20	
Sodium	6.39	1.00	mg/L	6.48		98.7	85-115	1.89	20	

DRAFT REPORT

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Dissolved Metals by ICP - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B508091 - Dissolved Metals, E200.7/E200.8

##### Blank (B508091-BLK1)

Prepared & Analyzed: 08/11/15

Aluminum	ND	0.050	mg/L
Calcium	ND	0.020	mg/L
Iron	ND	0.050	mg/L
Magnesium	ND	0.100	mg/L
Manganese	ND	0.005	mg/L
Potassium	ND	1.00	mg/L
Sodium	ND	1.00	mg/L

##### LCS (B508091-BS1)

Prepared & Analyzed: 08/11/15

Aluminum	4.89	0.050	mg/L	5.00	97.8	85-115
Calcium	4.94	0.020	mg/L	5.00	98.8	85-115
Iron	4.72	0.050	mg/L	5.00	94.5	85-115
Magnesium	25.2	0.100	mg/L	25.0	101	85-115
Manganese	2.48	0.005	mg/L	2.50	99.3	85-115
Potassium	9.97	1.00	mg/L	10.0	99.7	85-115
Sodium	7.80	1.00	mg/L	8.10	96.3	85-115

##### LCS Dup (B508091-BSD1)

Prepared & Analyzed: 08/11/15

Aluminum	4.99	0.050	mg/L	5.00	99.8	85-115	1.98	20
Calcium	5.03	0.020	mg/L	5.00	101	85-115	1.92	20
Iron	4.83	0.050	mg/L	5.00	96.5	85-115	2.15	20
Magnesium	25.7	0.100	mg/L	25.0	103	85-115	2.02	20
Manganese	2.52	0.005	mg/L	2.50	101	85-115	1.61	20
Potassium	10.1	1.00	mg/L	10.0	101	85-115	1.13	20
Sodium	7.93	1.00	mg/L	8.10	98.0	85-115	1.71	20

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Total Recoverable Metals by ICPMS (E200.8) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

#### Batch B508090 - EPA 200.2M

##### Blank (B508090-BLK1)

Prepared & Analyzed: 08/11/15

Antimony	0.0009	0.0005	mg/L							B3
Arsenic	0.0007	0.0005	mg/L							B3
Barium	ND	0.0005	mg/L							
Beryllium	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Chromium	ND	0.0010	mg/L							
Cobalt	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Nickel	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Silver	ND	0.0001	mg/L							
Thallium	ND	0.0001	mg/L							
Zinc	ND	0.0010	mg/L							

##### LCS (B508090-BS1)

Prepared & Analyzed: 08/11/15

Antimony	0.0574	0.0005	mg/L	0.0500	115	85-115
Arsenic	0.0536	0.0005	mg/L	0.0500	107	85-115
Barium	0.0494	0.0005	mg/L	0.0500	98.8	85-115
Beryllium	0.0532	0.0005	mg/L	0.0500	106	85-115
Cadmium	0.0513	0.0001	mg/L	0.0500	103	85-115
Chromium	0.0533	0.0010	mg/L	0.0500	107	85-115
Cobalt	0.0523	0.0001	mg/L	0.0500	105	85-115
Copper	0.0522	0.0001	mg/L	0.0500	104	85-115
Lead	0.0489	0.0005	mg/L	0.0500	97.8	85-115
Molybdenum	0.0524	0.0005	mg/L	0.0500	105	85-115
Nickel	0.0499	0.0005	mg/L	0.0500	99.9	85-115
Selenium	0.256	0.0010	mg/L	0.250	102	85-115
Silver	0.0473	0.0001	mg/L	0.0500	94.5	85-115
Thallium	0.0454	0.0001	mg/L	0.0500	90.8	85-115
Zinc	0.0546	0.0010	mg/L	0.0500	109	75-125

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Total Recoverable Metals by ICPMS (E200.8) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B508090 - EPA 200.2M

##### LCS Dup (B508090-BSD1)

Prepared & Analyzed: 08/11/15

Antimony	0.0575	0.0005	mg/L	0.0500		115	85-115	0.0865	20	
Arsenic	0.0523	0.0005	mg/L	0.0500		105	85-115	2.42	20	
Barium	0.0486	0.0005	mg/L	0.0500		97.2	85-115	1.65	20	
Beryllium	0.0518	0.0005	mg/L	0.0500		104	85-115	2.75	20	
Cadmium	0.0494	0.0001	mg/L	0.0500		98.9	85-115	3.74	20	
Chromium	0.0525	0.0010	mg/L	0.0500		105	85-115	1.36	20	
Cobalt	0.0510	0.0001	mg/L	0.0500		102	85-115	2.60	20	
Copper	0.0489	0.0001	mg/L	0.0500		97.8	85-115	6.63	20	
Lead	0.0486	0.0005	mg/L	0.0500		97.2	85-115	0.592	20	
Molybdenum	0.0524	0.0005	mg/L	0.0500		105	85-115	0.0928	20	
Nickel	0.0501	0.0005	mg/L	0.0500		100	85-115	0.361	20	
Selenium	0.253	0.0010	mg/L	0.250		101	85-115	1.13	20	
Silver	0.0481	0.0001	mg/L	0.0500		96.2	85-115	1.72	20	
Thallium	0.0456	0.0001	mg/L	0.0500		91.2	85-115	0.407	20	
Zinc	0.0527	0.0010	mg/L	0.0500		105	75-125	3.46	20	

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Dissolved Metals by ICPMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B508081 - Dissolved Metals, E200.7/E200.8

##### Blank (B508081-BLK1)

Prepared &amp; Analyzed: 08/10/15

Antimony	0.0008	0.0005	mg/L							B3
Arsenic	ND	0.0005	mg/L							
Barium	ND	0.0005	mg/L							
Beryllium	ND	0.0005	mg/L							
Cadmium	ND	0.0001	mg/L							
Chromium	ND	0.0010	mg/L							
Cobalt	ND	0.0001	mg/L							
Copper	ND	0.0001	mg/L							
Lead	ND	0.0005	mg/L							
Molybdenum	ND	0.0005	mg/L							
Nickel	ND	0.0005	mg/L							
Selenium	ND	0.0010	mg/L							
Silver	ND	0.0001	mg/L							
Thallium	ND	0.0001	mg/L							
Vanadium	ND	0.0005	mg/L							
Zinc	ND	0.0010	mg/L							

##### LCS (B508081-BS1)

Prepared &amp; Analyzed: 08/10/15

Antimony	0.0478	0.0005	mg/L	0.0500	95.6	85-115
Arsenic	0.0508	0.0005	mg/L	0.0500	102	85-115
Barium	0.0484	0.0005	mg/L	0.0500	96.7	85-115
Beryllium	0.0500	0.0005	mg/L	0.0500	100	85-115
Cadmium	0.0490	0.0001	mg/L	0.0500	98.1	85-115
Chromium	0.0497	0.0010	mg/L	0.0500	99.4	85-115
Cobalt	0.0480	0.0001	mg/L	0.0500	95.9	85-115
Copper	0.0501	0.0001	mg/L	0.0500	100	85-115
Lead	0.0473	0.0005	mg/L	0.0500	94.7	85-115
Molybdenum	0.0489	0.0005	mg/L	0.0500	97.7	85-115
Nickel	0.0483	0.0005	mg/L	0.0500	96.7	85-115
Selenium	0.251	0.0010	mg/L	0.250	100	85-115
Silver	0.0476	0.0001	mg/L	0.0500	95.2	85-115
Thallium	0.0460	0.0001	mg/L	0.0500	92.0	85-115
Vanadium	0.0479	0.0005	mg/L	0.0500	95.8	85-115
Zinc	0.0478	0.0010	mg/L	0.0500	95.7	85-115

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Dissolved Metals by ICPMS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B508081 - Dissolved Metals, E200.7/E200.8

##### LCS Dup (B508081-BSD1)

Prepared & Analyzed: 08/10/15

Antimony	0.0505	0.0005	mg/L	0.0500		101	85-115	5.45	20	
Arsenic	0.0518	0.0005	mg/L	0.0500		104	85-115	1.93	20	
Barium	0.0501	0.0005	mg/L	0.0500		100	85-115	3.61	20	
Beryllium	0.0506	0.0005	mg/L	0.0500		101	85-115	1.16	20	
Cadmium	0.0504	0.0001	mg/L	0.0500		101	85-115	2.73	20	
Chromium	0.0504	0.0010	mg/L	0.0500		101	85-115	1.49	20	
Cobalt	0.0475	0.0001	mg/L	0.0500		95.1	85-115	0.857	20	
Copper	0.0509	0.0001	mg/L	0.0500		102	85-115	1.65	20	
Lead	0.0489	0.0005	mg/L	0.0500		97.8	85-115	3.30	20	
Molybdenum	0.0500	0.0005	mg/L	0.0500		99.9	85-115	2.23	20	
Nickel	0.0494	0.0005	mg/L	0.0500		98.8	85-115	2.15	20	
Selenium	0.256	0.0010	mg/L	0.250		102	85-115	2.01	20	
Silver	0.0439	0.0001	mg/L	0.0500		87.8	85-115	8.18	20	
Thallium	0.0470	0.0001	mg/L	0.0500		94.1	85-115	2.25	20	
Vanadium	0.0473	0.0005	mg/L	0.0500		94.6	85-115	1.24	20	
Zinc	0.0492	0.0010	mg/L	0.0500		98.3	85-115	2.73	20	

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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Total Mercury by CVAA- Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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#### Batch B508083 - EPA 245.1/7470

##### Blank (B508083-BLK1)

Prepared & Analyzed: 08/10/15

Mercury	ND	0.0002	mg/L
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##### LCS (B508083-BS1)

Prepared & Analyzed: 08/10/15

Mercury	0.0021	0.0002	mg/L	0.00200	106	85-115
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##### LCS Dup (B508083-BSD1)

Prepared & Analyzed: 08/10/15

Mercury	0.0023	0.0002	mg/L	0.00200	115	85-115	7.77	20
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Southern Ute Tribe Environmental  
PO Box 737  
Ignacio CO, 81137

Project: 8/8/15  
Project Name / Number: [none]  
Project Manager: Curtis Hartenstein

Reported:  
08/11/15 16:21

### Notes and Definitions

B3	Target analyte detected in method blank or continuing calibration blank. Reporting limit elevated to account for blank result.
B1	Target analyte detected in method blank at or above method reporting limit. Sample concentration found to be 10 times above the concentration found in the method blank or less than the reporting limit.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis *Results reported on as received basis unless designated as dry.
RPD	Relative Percent Difference
LCS	Laboratory Control Sample (Blank Spike)
RL	Report Limit
MDL	Method Detection Limit

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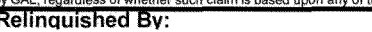
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Relinquished By: 		Date: 8-8-15	Received By: Michael Valentine	ADDITIONAL REMARKS:	Report to State? (Circle)	
		Time: 1600			Yes	No
Relinquished By:		Date:	Received By:			
		Time:				
Relinquished By:		Date:	Received By:			
		Time:				
Delivered By: (Circle One)			Temperature at receipt:	CHECKED BY:	5-Day Rush!	
Sampler - UPS - FedEx - Kangaroo - Other:			9.0°C on ice	MV		

\* Chain of Custody must be signed in "Relinquished By:" as an acceptance of services and all applicable charges.

**From:** Hartenstine, Curtis [mailto:charten@southernute-nsn.gov]  
**Sent:** Saturday, August 08, 2015 8:56 AM  
**To:** jacob.miller@greenanalytical.com  
**Subject:** Ute WQ Request

Hi Jacob, Thanks for helping us out. This is what we are looking at. It is the same analyte list as EPA. Let me know if you can perform all or some of this. I can come by today before closing to get bottle sets.

Thanks, Curtis

PARAMETER	Fraction	UNITS	METHOD	MDL	PQL
Surface Water					
Aluminum	Trec, D	mg/l	M200.7 ICP	0.03	0.2
Calcium	Trec, D	mg/l	M200.7 ICP	0.2	1
Iron	Trec, D	mg/l	M200.7 ICP	0.02	0.05
Magnesium	Trec, D	mg/l	M200.7 ICP	0.2	1
Potassium	Trec, D	mg/l	M200.7 ICP		
Sodium	Trec, D	mg/l	M200.7 ICP		
Silver	Trec, D	mg/l	M200.7 ICP	0.01	0.03
Arsenic	Trec, D	mg/l	M200.8 ICP-MS	0.0005	0.002
Cadmium	Trec, D	mg/l	M200.8 ICP-MS	0.0001	0.0005
Copper	Trec, D	mg/l	M200.8 ICP-MS	0.01	0.05
Selenium	T and D	mg/l	M200.8 ICP-MS	0.0001	0.0003
Zinc	Trec, D	mg/l	M200.8 ICP-MS	0.01	0.05
Barium	Trec, D	mg/l	M200.8 ICP-MS		
Beryllium	Trec, D	mg/l	M200.8 ICP-MS		
Cobalt	Trec, D	mg/l	M200.8 ICP-MS		
Chromium	Trec, D	mg/l	M200.8 ICP-MS		
Manganese	Trec, D	mg/l	M200.8 ICP-MS		
Molybdenum	Trec, D	mg/l	M200.8 ICP-MS		
Nickel	Trec, D	mg/l	M200.8 ICP-MS		
Lead	Trec, D	mg/l	M200.8 ICP-MS		
Antimony	Trec, D	mg/l	M200.8 ICP-MS		
Selenium	Trec, D	mg/l	M200.8 ICP-MS		
Thallium	Trec, D	mg/l	M200.8 ICP-MS		
Vanadium	Trec, D	mg/l	M200.8 ICP-MS		
Bicarbonate as CaCO3		mg/l	SM2320B-Titration	2	20
Carbonate as CaCO3		mg/l	SM2320B-Titration	2	20
Hardness as CaCO3		mg/l	SM2320B-Calculation	1	7
Residue, Non-Filterable (TSS) @ 150°C		mg/l	SM2540D	5	20

→ ICP-MS

TR

10 sets